method of contraception should be utilized during treatment. Therapy should be continued until a remission has occurred for a maximum of six months. Unfortunately, after stopping therapy with bromocriptine most patients have a recurrence of symptoms.

Side effects include nausea (usually transient) and vomiting in some patients. A variety of other gastrointestinal side effects as well as headaches, dizziness, lightheadedness and nasal congestion have been reported occasionally.

In the future, bromocriptine may be used for many indications. Of paramount interest will be its use in treatment of infertility, suppression of postpartum lactation and therapy for patients who have prolactin-secreting pituitary tumors. Other uses may be amenorrhea-galactorrhea without hyperprolactinemia, luteal phase defects, acromegaly, Parkinson disease, and some cases of breast carcinoma. Early reports of its use for men with hypogonadotropic hypogonadism have also been favorable.

In summary, the availability of bromocriptine has opened new vistas. This agent appears to be highly effective in therapy for patients with a wide variety of conditions. Factors limiting its widespread application in the immediate future are the occasionally catastrophic complications of pregnancy in a patient with a pituitary tumor and a still unproved freedom from teratogenic effects.

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The Pap Test: How Often?

CARCINOMA OF THE CERVIX ranks as the second most common gynecologic malignant condition with 20,000 new cases and 7,400 deaths reported in 1978. A preponderance of evidence indicates a continuum from dysplasia through carcinoma in situ (CIS) to invasive cancer. Although some precursor lesions may remain stable for years, or even regress, most are thought to progress over a variable period of time. On this basis it is logical to diagnose the dysplasias and CIS as early as possible because the therapy of cervical intraepithelial neoplasia (CIN) is relatively simple and complication-free compared with the therapy of invasive cervical carcinoma, and can allow preservation of reproductive function. These considerations are of even greater importance as the incidence of CIN lesions has reached epidemic proportions in the younger, sexually-active population. It has been estimated that more than 40,000 cases of cervical carcinoma in situ were detected in 1976; the annual rate appears to have increased since that report.

Although the cytologic smear represents a proven technique for the detection of precursor cervical lesions, recent information, such as in the Walton Report, has suggested that a yearly Papanicolaou (Pap) test is not cost-effective and is unnecessary for most women. However, this contention should not be accepted without qualification. A more logical approach would be to take into consideration the relative risk for a given patient population. A low-risk group would include women with a history of three serially normal annual Pap tests and an historical sexual pattern which includes an active coital life commencing after age 18, and involving few sexual partners. The conditions of these persons may safely be followed by cytologic sampling every two to three years. However, a high-risk group may be identified by the following: (1) a history of first coitus or pregnancy at an early age (<18 years) and (2) multiple sexual partners or prior diagnosis by an abnormal Pap test result. Additional high-risk factors include a history of herpes virus infection and sexual partners (1) previously married to a woman with cervical carcinoma or (2) with a history of penile or prostatic carcinoma. Women in this category should undergo cytologic cervical evaluation once a year or every six months.

The case for yearly Pap tests is emphasized by a report from Fox. In a group of 547 women with abnormal Pap test results, 195 (35 percent) had a history of previous negative cytology, and 41 (7.5 percent) had three prior negative smears. In 141 women (26 percent) cytologic atypia developed in less than two years from the last normal smear. Of great significance is that in 51 of 140 women (36 percent) significant atypia developed within six months of a negative smear.

In addition, a Pap test is the single most powerful stimulus that brings women to physicians' offices for annual examinations. Carcinoma of the breast represents the greatest cause of death from cancer in women, colorectal carcinoma is third and ovarian cancer is the most frequent cause of death from gynecologic malignancy. The

potential benefits of a yearly physical examination are obvious.

Until a technique of greater accuracy and logistic simplicity becomes available, annual Pap tests should be recommended in all but clearly low-risk women.

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Use of Glucocorticoids in Promoting Fetal Lung Maturation

DESPITE SIGNIFICANT ADVANCES in neonatal intensive care, the respiratory distress syndrome (RDS) in prematurely delivered infants is still associated with a high degree of morbidity and mortality. In an attempt to reduce the incidence and severity of RDS, the maternal administration of glucocorticoids 24 to 48 hours before the delivery of a premature infant has become part of our medical armamentarium.

The fetal lung is reported to be rich in glucocorticoid receptors. Glucocorticoids apparently cause cytodifferentiation of type II pneumocytes and stimulate the production and release of surfactant by induction of the enzyme phosphoryl choline transferase. The end point being an increase in the lecithin:sphingomyelin (L:S) ratio indicating pulmonic maturity.

The original indication for the use of glucocorticoids was in a patient in premature labor, with intact membranes. This indication has been broadened to include those patients with ruptured membranes and without evidence of infection. Most studies have failed to show any statistically significant increase in maternal or neonatal infections with the use of glucocorticoids in patients with premature rupture of membranes.

Obstetricians have been cautioned against the use of glucocorticoids to promote pulmonic maturity in pregnant women with severe hypertension because of a reported increase in antepartum fetal deaths. Steroid induced compromise of an already compromised placenta is the purported mechanism of action. However, others have shown that under controlled conditions, glucocorticoid therapy need not be an absolute contraindication in the hypertensive pregnant patient.

Concern has also been expressed as to whether the use of glucocorticoids could adversely affect the developing fetus or neonate. Studies in animals have shown an inhibition in growth and brain development; a reduction in the absolute number of circulating B and T cells, as well as neonatal adrenal insufficiency. Again, evidence for these comes mostly from studies in animals.

Whether betamethasone or dexamethasone is used is not important except perhaps that the latter has been reported to have increased binding to fetal lung receptors. What is important is that glucocorticoids have been shown to be effective in accelerating pulmonary maturity only in infants born at or before 32 weeks of gestation. The use of steroids after 32 weeks has not influenced the L:S ratio. Also, glucocorticoid therapy offers no protection when given less than 24 hours before delivery.

The role of glucocorticoids in accelerating lung maturity has been firmly established. However, what remains to be determined is whether the potential risks outweigh the intended benefit. Steroid therapy requires care and discretion and should be accompanied by adequate follow-up to study any possible adverse effects.

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A Second-Look Operation in the Management of Patients With Carcinoma of the Ovary

MUCH OF THE CONFUSION caused by the concept of a second-look laparotomy relates to the lack of a consistent definition. Second operations in patients with ovarian carcinoma are frequent and usually are related to therapy. These include, for example, surgical relief of intestinal obstruction as well as second attempts at tumor reduction. The term second-look laparotomy, however, should be reserved for those instances in which the procedure is carried out on a patient undergoing chemotherapy who appears clinically to be free of disease. The purpose of the operation is to document the patient's disease-free status, so that chemotherapy can be discontinued. The reported increased incidence of acute nonlymphocytic leukemia in patients on prolonged alkylating-agent therapy has precipitated interest in this procedure.

The second-look operation is far from a simple